

The Shoebill

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Résumé: La découverte originelle est relatée, suivie d'une description sommaire et de quelques notes sur l'écologie de cet oiseau, le plus extraordinaire d'Afrique. Pour les ornithologues amateurs il s'agit d'une des espèces les plus recherchées en Afrique, ce qui s'explique au moins en partie par son habitat inaccessible, constitué de vastes marécages éloignés. L'article conclut en donnant quelques notes sur les meilleurs endroits pour voir l'espèce.

Gould knew he had something truly exceptional, from a collection 'by Mansfield Parkyn, Esq., of Nottingham', made on the banks of the upper White Nile. Under the title *On a new and most remarkable form in ornithology*, the first paper in *Proceedings of the Zoological Society of London* for 1851, he called it *Balaeniceps rex*, 'the most extraordinary bird I have seen for many years', words that doubtless echo through many people's minds when they have their first good view of the species.

Gould's name means 'King Whalehead', and for most of its career as a mysterious, monstrous, almost mythical inhabitant of the impenetrable marshes of the upper Nile and its tributaries, it has gone by the English name of 'Whale-headed Stork'. The Arabs, however, called it 'abu markub' – 'father of the shoe', and presumably in deference to this the Germans have long used the name 'Schuhschnabel'. Nine inches long and four inches broad (23 x 10 cm), the bill is certainly big enough to serve as a clog for the average human foot. The idea of this incredible structure as a shoe is by no means inappropriate, suggesting as it does a container (one of the lighter sides of the species's life is when parents use it to pour quantities of water over their overheated nestlings). At any rate, 'Shoebill' has gradually gained ascendancy as the name for one of the most exciting and sought-after of all the birds of the African continent.

Taxonomy

Long in the leg and broad in the wing, standing well over a metre high and dressed entirely in dull, scaly



Shoebill *Balaeniceps rex*
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grey, the Shoebill is dominated by its feeding apparatus, a huge and powerful appendage ending in a ferocious nail-like hook. Violent and primitive in appearance, the bird has caused taxonomists constant vexation and bafflement over its affinities. Gould thought it was allied to the pelicans, but it has characters that place it close both to storks and to herons. Its behaviour at the nest suggests stork ancestry but its retracted neck in flight recalls both pelicans and herons. Like herons it has powder-downs, but only on the back; unlike them, but like pelicans, it has no pectinated claw on the third toe. DNA studies by Sibley and Ahlquist now indicate that Gould was right, and that the Shoebill, hitherto always a member of its own family, can even be placed as a subfamily of the Pelecanidae.

Discovery

After the bill, perhaps the most extraordinary thing about the bird is that, as massive as it is distinctive, and with its centre of distribution in lands to the south of Egypt, it only became known to science at the midpoint of the nineteenth century. At this stage, the Snail-eating Coua *Coua delalandei* of Madagascar had been seen alive (or recorded as such) for the last time some 10 years before, and the Wattled Crane *Bugeranus carunculatus*, similarly bound to the interior marshes of Africa (albeit over a wider area), had been recognized for over 60 years. All the same, the Shoebill's defiantly individual appearance indicates how much it has evolved to occupy a highly individual niche, and one which happens to tie it to some of the most inaccessible habitat in the world.

Habitat and feeding

Shoebills prefer swamps, marshes and in particular floating vegetation or *sudd*, formed notably, though not exclusively, by papyrus. They generally keep to the more open areas, to avert problems with take-off that canopies of pure papyrus and tall grass would cause. Sluggish and largely solitary, they will utilise channels widened or even opened up by Hippos and Elephants. In Sudan, they commonly occur in swamp 'transmission zones', where slow, deep water shifts down channels and through lagoons to lower lakeland areas, and where fish concentrate as they move through. The Shoebill feeds on them chiefly by ambush, standing motionless on banks or floating vegetation above these areas of deep water.

The attack, when it comes, is awesome in its speed and power, the massive bird flapping and pouncing downward to grasp the passing fish in its inescapable mandibles, the sharp, upcurving edges and hooked-over tooth gripping, crushing and piercing in one decisive moment. African lungfish are common prey among a variety of larger fish, though smaller types are also caught. Amphibians, water-snakes, monitor lizards, turtles and even young crocodiles, sometimes fall prey to the outsize jaws; so too do rats, young waterfowl and - reputedly - Lechwe calves. The crocodiles, at least, may get their own back.

The birds nest solitarily, laying one to three eggs in a large flat nest built amid swamp grasses or sedges, usually in remote areas. Inter-sibling rivalry may account for the fact that only one bird normally fledges; when none does so, the culprit may well be a crocodile. The breeding season is generally ill-defined, but there is some evidence that it coincides with the onset of the dry season, when floods are receding. It takes 140 days of nest-attendance to get from new-laid egg to independ-

ent offspring; and it takes three to four years to get from newly independent offspring to mature adult.

Populations

The smallest of seven territories measured in Uganda was 2.5 km², so this inevitably is a low density species. Estimating its numbers has proved very difficult, however. A global total of around 1,500 suggested in the late 1970s was quickly disowned by its proponent as out by a factor of ten, and indeed impact assessment work on the Jonglei Canal in Sudan in the early 1980s showed that up to 10,000 birds were then present in that country alone. A recent (1990) survey of the Moyowosi-Kigosi Swamp, the one site for the species in Tanzania, replaced the previous estimate of over 300 with one of over 2,500. Work in Uganda in the late 1980s seems to indicate that a rough estimate of 400-600 made a few years earlier may also be an under-representation.

This and other evidence suggests that the Shoebill probably survives well enough in its marshland fastnesses in the three countries mentioned, plus Zaïre, Zambia, Rwanda and the Central African Republic. Records from other countries are few and seem generally to refer to vagrants (the bird soars to great heights and clearly possesses good dispersive abilities), although there is yet the chance a small population breeds in Malawi, where local people in Liwonde National Park have a name for the species. All the same, this is a bird the *African Red Data Book*



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lists as 'Of Special Concern', owing to swamp drainage and general disturbance and modification of habitat, as well as direct persecution for food and trade. Whatever its status, it is one of the great African species, one of the major challenges in birdwatching, and always a bird to cherish. ☉

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